

Disaster Recovery Setup (ASR)

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Overview:

Azure site recovery helps to business continuity and disaster recovery (BCDR). Keeps applications online during planned and unplanned outages. Site recovery manages on-premises machines and Azure virtual machines including replication, failover, and recovery.

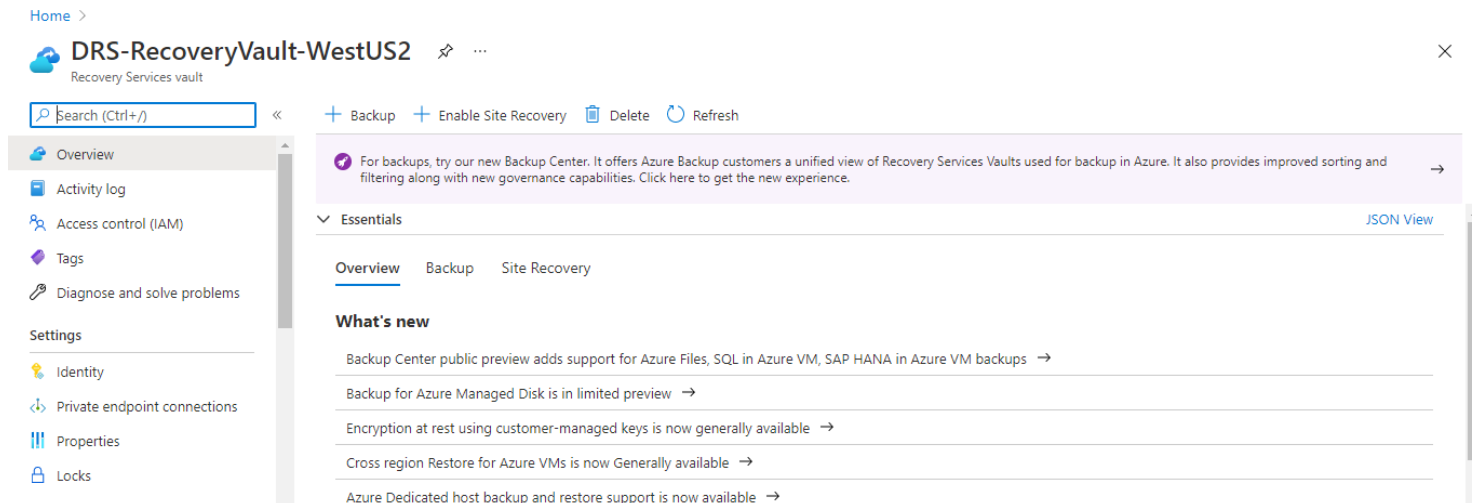
Pre-requisites:

Below resources need to be create at Target site (DR).

- Recovery Service Vault
- Resource Group
- Virtual Network
- Subnets
- Availability Sets
- Load balancers

Steps:

1. Open recovery server vault



Home > **DRS-RecoveryVault-WestUS2** Recovery Services vault

Search (Ctrl+/) << + Backup + Enable Site Recovery Delete Refresh

For backups, try our new Backup Center. It offers Azure Backup customers a unified view of Recovery Services Vaults used for backup in Azure. It also provides improved sorting and filtering along with new governance capabilities. Click here to get the new experience. →

Essentials JSON View

Overview Backup Site Recovery

What's new

- Backup Center public preview adds support for Azure Files, SQL in Azure VM, SAP HANA in Azure VM backups →
- Backup for Azure Managed Disk is in limited preview →
- Encryption at rest using customer-managed keys is now generally available →
- Cross region Restore for Azure VMs is now Generally available →
- Azure Dedicated host backup and restore support is now available →

2. Then click on the **Enable Site Recovery** option.

The screenshot shows the Azure portal interface for the 'DRS-RecoveryVault-WestUS2' Recovery Services vault. On the left, there is a sidebar with navigation options like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Settings, Identity, Private endpoint connections, Properties, Locks, Getting started, Backup, and Site Recovery. The main content area shows the vault's details, including a search bar, a list of actions (Backup, **Enable Site Recovery**, Delete, Refresh), and a 'What's new' section with various updates. The 'Enable Site Recovery' button is highlighted with a red box.

3. Select the below option Enable Replication.

The screenshot shows the 'DRS-RecoveryVault-WestUS2 | Site Recovery' page in the Azure portal. The page title is 'Protect your infrastructure for disaster recovery'. Below the title, there are two main sections: 'Azure virtual machines' and 'VMware machines to Azure'. Under 'Azure virtual machines', the first step '1: Enable replication' is highlighted with a red box. The second step is '2: Manage recovery plans'. Under 'VMware machines to Azure', the first step is '1: Prepare infrastructure' and the second step is '2: Enable replication'.

- Redirect the next there need to provide source details as given below:

Home > Recovery Services vaults > DRS-RecoveryVault-WestUS2 >

Enable replication

1 Source 2 Virtual machines 3 Replication settings

Source location *	East US
Azure virtual machine deployment model *	Resource Manager
Source subscription *	Microsoft Azure Enterprise
Source resource group *	XXXXXXXXXXXXXXXXXXXX
Disaster Recovery between Availability Zones? *	No
Availability Zones *	Select

Previous

Next

- Select the respective servers which need to replicate.

Home > Recovery Services vaults > DRS-RecoveryVault-WestUS2 >

Enable replication

0

✓ Source 2 Virtual machines 3 Replication settings

Unable to view / select your VMs? Click [here](#) to know why.

Filter items...

Name	Virtual network	Tags
<input checked="" type="checkbox"/> VM-XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	
<input checked="" type="checkbox"/> VM-XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	

Selected machines: 2

Previous

Next

6. Provide the target (DR) details like (Region, Subscription and required information).

Enable replication ...

✓ Source
✓ Virtual machines
3 Replication settings

Target location * ⓘ

West US 2

Target subscription ⓘ Customize

Microsoft Azure Enterprise-DR

⚠ If you are choosing General Purpose v2 storage accounts, ensure that operations and data transfer prices are understood clearly before you proceed. [Learn more](#)

Resource group, Network, Storage and Availability ⓘ Customize

By default Site Recovery will mirror the source site configuration to target site by creating/using the required resource groups, storage accounts, virtual network and availability sets as below. Click 'Customize' above to change the configuration. All newly

Home > Recovery Services vaults > DRS-RecoveryVault-WestUS2 > Enable replication >

Customize target settings ...

ⓘ By default, Site Recovery will mirror the source site configuration to target site by creating/using the required resource groups, storage accounts, virtual network, managed disks and availability sets. You can change the settings below.

General settings

Target resource group

Target virtual network ⓘ

VM settings

VM Name	Source managed disk	Replica managed disk	Cache storage	Disk to replicate	Target availability type	Target proximity placement ...
▼ SWIAAPDMZDNN-AS-P...	2 managed disks	2 managed disks	(new) ysg13pdrsrecov...		Microsoft Azure Enterprise-DR	Select

VM settings

VM Name	Source managed disk	Replica managed disk	Cache storage	Disk to replicate	Target availability type	Target proximity placement ...
▼ SWIAAPDMZDNN-AS-P...	2 managed disks	2 managed disks	(new) ysg13pdrsrecov...		Microsoft Azure Enterprise-DR	Select
	[Premium SSD] ...	(new) [Premium SSD] ...		<input checked="" type="checkbox"/> include		
	[Premium SSD] ...	(new) [Premium SSD] ...		<input checked="" type="checkbox"/> include		
	2 managed disks	2 managed disks	(new) ysg13pdrsrecov...			
	[Premium SSD] ...	(new) [Premium SSD] ...		<input checked="" type="checkbox"/> include		
	[Premium SSD] ...	(new) [Premium SSD] ...		<input checked="" type="checkbox"/> include		

OK

7. Then Enable the replication.

Home > Recovery Services vaults > DRS-RecoveryVault-WestUS2 >

Enable replication

⚠️ If you are choosing General Purpose v2 storage accounts, ensure that operations and data transfer prices are understood clearly before you proceed. [Learn more](#)

Resource group, Network, Storage and Availability [Customize](#)

By default Site Recovery will mirror the source site configuration to target site by creating/using the required resource groups, storage accounts, virtual network and availability sets as below. Click 'Customize' above to change the configuration. All newly created resources except disks are appended with the suffix "asr". Disks are appended with the suffix "asrreplica".


Target resource group ⓘ <small>(new) ysg13pdrsrcoveasrcache</small>	Target virtual network ⓘ <small>(new) 4 premium disks(s), 0 standard disk(s)</small>
Cache storage accounts ⓘ <small>(new) ysg13pdrsrcoveasrcache</small>	Replica managed disks ⓘ <small>(new) 4 premium disks(s), 0 standard disk(s)</small>
Target availability sets ⓘ <small>swiaaravs-dnn_v9.2</small>	
Target proximity placement group ⓘ <small>Not Applicable</small>	

Previous **Enable replication**

8. Click the notification it will redirect to the status recovery job which is created by automatically.

Notifications

More events in the activity log → Dismiss all



Enabling replication for 2 vm(s)
Successfully completed the operation.

a few seconds ago

Home >

Site Recovery jobs

DRS-RecoveryVault-WestUS2

[Filter](#) [Export jobs](#)

Filter items...											
Name	↑↓	Status	↑↓	Type	↑↓	Item	↑↓	Start time	↑↓	Duration	↑↓
Enable replication		✔ Successful		Protected item		swiaapdmzdnnp02		4/20/2021, 12:32:11 PM		00:06:53	
Enable replication		✔ Successful		Protected item		swiaapdmzdnnp01		4/20/2021, 12:32:10 PM		00:07:05	
Associate replication policy		✔ Successful		Replication policy		24-hour-retention-policy		4/20/2021, 12:30:32 PM		00:01:15	
Map Networks		✔ Successful		Network		drs-net-amer		4/20/2021, 12:28:54 PM		00:00:01	
Associate replication policy		✔ Successful		Replication policy		24-hour-retention-policy		4/20/2021, 12:28:53 PM		00:01:30	
Map Networks		✔ Successful		Network		prd-net-amer		4/20/2021, 12:28:14 PM		00:00:02	
Create protection container		✔ Successful		Cloud		asr-a2a-default-westus2-container		4/20/2021, 12:28:14 PM		00:00:00	
Create a site		✔ Successful		Server		asr-a2a-default-westus2		4/20/2021, 12:26:58 PM		00:01:08	
Create protection container		✔ Successful		Cloud		asr-a2a-default-eastus-container		4/20/2021, 12:26:58 PM		00:00:00	
Create a site		✔ Successful		Server		asr-a2a-default-eastus		4/20/2021, 12:25:39 PM		00:01:06	

- Go back to recovery service vault overview page and select replicated items. Here we can find all the replicated VMs information.

Home > DRS-RecoveryVault-WestUS2

DRS-RecoveryVault-WestUS2 | Replicated items

Recovery Services vault

Search (Ctrl+/) Refresh + Replicate Columns Filter

You can run your machines on managed disks after a failover or migration from on-premises to Azure. Set the option to use managed disks in Replicated item -> Settings -> Compute and Network.

Last refreshed at: 4/20/2021, 12:41:11 PM

Finished loading data from service.

Filter items...

Name	Replication Health	Status	Active location	Failover Health
[Redacted]	Healthy	0% Synchronized	East US	-
[Redacted]	Healthy	0% Synchronized	East US	-

- Edit the compute and network and provide the target VM/Vnet/Subnet/Load Balancer details as per requirement. Before Test failover / Failover.

Home > DRS-RecoveryVault-WestUS2 > SWIAAPDMZDNNP01

SWIAAPDMZDNNP01 | Compute and Network

Replicated items

Search (Ctrl+/) Overview Properties Compute and Network Disks

General

Compute properties

Properties	Source settings	Target settings
Subscription	Microsoft Azure Enterprise-Prod	Microsoft Azure Enterprise-DR
Name	[Redacted]	[Redacted] ✓
Resource group	[Redacted]	[Redacted]
Size	Standard_F16s	F16s (16 cores, 32 GB memory, 8 NICs)
Availability	Availability set [Redacted]	Availability set [Redacted]

Network properties

Properties	Source network	Test failover network	Target network
Virtual network	[Redacted]	[Redacted]	[Redacted]

Properties	Network interfaces			
Compute and Network	swiaapdmzdnnp01881 Edit			
Disks				
Properties	Source settings	Test failover settings	Target settings	
Name	swiaapdmzdnnp01881	swiaapdmzdnnp01881	swiaapdmzdnnp01881	
Subnet	Private IP address	DHCP assigned	Static IP address	
Private IP address	Static IP address	DHCP assigned	Static IP address	
Accelerated Networking	Enabled	Disabled	Enabled	
Public IP	None	None	None	
Load balancer	None	None	None	
Network security group	None	None	None	

Home > DRS-RecoveryVault-WestUS2 > SWIAAPDMZDNNP01

Replicated items

Search (Ctrl+ /)

Overview

General

Properties

Compute and Network

Disks

Disks

Operating system disk

Name	Status	Size	Pending data in source VM	Replica disk name	Target disk name
SWIAAPDMZDNNP01_OsD...	Protected	127.00 GB	2.64 MB	SWIAAPDMZDNNP01_OsD...	SWIAAPDMZDNNP01_osdisk...

Data disk

Name	Status	Size	Pending data in source VM	Replica disk name	Target disk name
SWIAAPDMZDNNP01_Data...	Protected	100.00 GB	0.00 MB	SWIAAPDMZDNNP01_Data...	SWIAAPDMZDNNP01_datadis...

11. Once all the respective VMs are replicated to Recovery Service Vault, select the replicated items option in overview it shows replicated VMs.

Home > DRS-RecoveryVault-WestUS2

DRS-RecoveryVault-WestUS2 | Replicated items

Recovery Services vault

Search (Ctrl+/)

Identity

Private endpoint connections

Properties

Locks

Getting started

Backup

Site Recovery

Protected items

Backup items

Replicated items

Manage

Backup policies

Refresh + Replicate Columns Filter

You can run your machines on managed disks after a failover or migration from on-premises to Azure. Set the option to use managed disks in Replicated item -> Settings -> Compute and Network.

Last refreshed at: 4/20/2021, 3:23:23 PM

Finished loading data from service.

Filter items...

Name	Replication Health	Status	Active location	Failover Health	
swiaapdmzdnnp01881	Healthy	Protected	East US	Warning	...
swiaapdmzdnnp01881	Healthy	Protected	East US	Warning	...
swiaapdmzdnnp01881	Healthy	Protected	East US	Warning	...
swiaapdmzdnnp018812	Healthy	Protected	East US	Warning	...
swiaapdmzdnnp01881	Healthy	Protected	East US	Warning	...

12. Do the test failover whenever application needed and ask them to do the sanity checks.

[Home](#) >

Test failover

Site Recovery Job

[Export job](#) [Environment Details](#)

Properties

Vault	drs-recoveryvault-westus2
Protected item	b13dbb69-5529-416c-ad4f-78ec2a7aa1b4-2021-04-29T07:39:09Z-lbz ActivityId: 61d79872-960b-4f32-af04-f0457ba536c4
Job id	b13dbb69-5529-416c-ad4f-78ec2a7aa1b4-2021-04-29T07:39:09Z-lbz ActivityId: 61d79872-960b-4f32-af04-f0457ba536c4

Job

Name	Status	Start time	Duration
Prerequisites check for test failover	Successful	4/29/2021, 1:09:20 PM	00:00:00
Create test virtual machine	Successful	4/29/2021, 1:09:20 PM	00:01:33
Preparing the virtual machine	Successful	4/29/2021, 1:10:53 PM	00:00:35
Start the virtual machine	Successful	4/29/2021, 1:11:29 PM	00:00:00



Thank you